WHAT IS CLAIMED IS:

1.   A data-providing system comprising:

a first data-transmitting section for transmitting a continuous stream of content data that consists of multimedia content groups, each composed of program data and auxiliary data items;

a control section for processing data items obtained by dividing each program data, attribute data of the auxiliary data items and user profile data, thereby to automatically assemble new data; and

a second data-transmitting section for selecting the auxiliary data items to be inserted into the program data in accordance with the new data assembled by the control section, thereby to transmit a continuous stream of content data that consists of multimedia content groups, each composed of the program data and the auxiliary data items.

2.   A data-providing system comprising:

a first data-transmitting section for transmitting a continuous stream of content data that consists of multimedia content groups, each composed of pre-assembled program data and auxiliary data items;

a control section for processing data items obtained by dividing each program data, attribute data of the auxiliary data items and user profile data, thereby to automatically assemble new data; and

a second data-transmitting section for selecting the auxiliary data items to be

inserted into the program data in accordance with the new data assembled by the control section, thereby to transmit a continuous stream of data.

3.   A data-providing system comprising:

a transmission server section for performing streaming transmission of on-demand programs; and

a terminal section for performing streaming reception of the on-demand programs transmitted from the transmission server section,

wherein the terminal section has a function of selecting a set of auxiliary data items to be inserted into a program, from sets of auxiliary data items, and a function of transmitting a signal representing the selected set of auxiliary data items, along with a terminal code of the terminal section; and the transmission server section has a function of receiving the signal transmitted from the terminal section and representing the selected set of auxiliary data items, assembling the auxiliary data items in real time, and transmitting the same in accordance with a transmission list of auxiliary data items that correspond to the set of auxiliary data items inserted in a series of programs to be transmitted to the terminal section.

4.   The data-providing system according to claim 3, further comprising a charge-settling section having a function of periodically tabulating charge-settling data stored in a data base for each user and controlled in the terminal section and transmitting a statement to the user, thereby to achieve charge-settling, and a function of periodically tabulating equivalents calculated to be paid among suppliers and

transmitting a statement to each player, thereby to accomplish charge-settling.

5.   The data-providing system according to claim 3, wherein the terminal section has a function of requesting the transmission server section for the advantages and disadvantages of a set of auxiliary data items that can be selected, after selecting a program that may be supplied to a user, and informing the user of the advantages and disadvantages of the set of auxiliary data items that can be selected; and the transmission server section has a function of determining, in response to a request made by the terminal section, advantages and disadvantages from the user price of a program and the advantages and disadvantages of the auxiliary data items inserted in the program and transmitting the advantages and disadvantages thus determined, said advantages and disadvantages determined being those the user may have when the program is transmitted together with the auxiliary data items selected.

6.   The data-providing system according to claim 4, wherein the transmission server section has a function of transmitting the charge-settling data finally obtained about the program selected by a customer who uses the terminal section, to the charge-settling section and the terminal section; and the charge-settling section applies the charge-settling data transmitted from the transmission server section, to the charge-settling data base provided for the terminal section, thereby to manage the charge-settling data.

7.   The data-providing system according to claim 4, wherein the transmission server section has a function of applying data representing payment made among

39

suppliers to the data base provided for each player, thereby to manage the payment, when a program is transmitted, together with selected auxiliary data items, in accordance with the supplier-side equivalent conditions of the program and the supplier-side equivalent conditions of auxiliary data items inserted in the program.

8.   A data-providing system comprising:

an authoring section having a function of registering, storing and transmitting program prices for user, a function of registering, storing and transmitting supplier-side equivalent conditions, a function of designating positions at which to insert auxiliary data items into a program, a function of designating auxiliary data items to be inserted into a program from auxiliary data libraries, and a function of determining an order in which to transmit the auxiliary data items prepared for a program and holding the order determined, in the form of an auxiliary data transmission list;

a transmission server section for transmitting a continuous stream of content data that consists of multimedia content groups, each being an assembly prepared and composed of program data and auxiliary data items; and

a terminal section for performing streaming reception of the on-demand programs transmitted from the transmission server section,

wherein the terminal section has a function of selecting a set of auxiliary data items to be inserted into a program, from sets of auxiliary data items, and a function of transmitting a signal representing the selected set of auxiliary data items, along with

40

a terminal code of the terminal section; and the transmission server section has a function of receiving the signal transmitted from the terminal section and representing the selected set of auxiliary data items, assembling the auxiliary data items in real time, and transmitting the same in accordance with a transmission list of auxiliary data items that correspond to the set of auxiliary data items inserted in a series of programs to be transmitted to the terminal section.

9.   The data-providing system according to claim 8, wherein the authoring section designates groups of auxiliary data items to be inserted into a program, from the plurality of auxiliary data libraries.

10.   The data-providing system according to claim 8, wherein the authoring section determines an order in which to transmit the auxiliary data items prepared for a program and holding the order determined, in the form of an auxiliary data transmission list.

11.   The data-providing system according to claim 8, wherein the authoring section further has a function of registering, storing and transmitting advantages and disadvantages a user has when a series of auxiliary data items designated in at least one auxiliary data transmission list are transmitted.

12.   The data-providing system according to claim 8, wherein the authoring section further has a function of registering, storing and transmitting the equivalents to be paid among suppliers when the auxiliary data items in the auxiliary data transmission list are transmitted and the auxiliary data equivalent conditions that are an order to moving

41

data.

13. A transmission server for processing data items obtained by dividing each program data, attribute data of the auxiliary data items, and user profile data, thereby to automatically assemble data, selecting a group of auxiliary data items to be inserted into the program data, in accordance with the data thus assembled, and transmitting a stream of the group of auxiliary data items.

14. The transmission server according to claim 13, wherein in response to a request made by the terminal section, advantages and disadvantages are determined from the user price of a program and the advantages and disadvantages of the auxiliary data items inserted in the program and transmitting the advantages and disadvantages thus determined, said advantages and disadvantages determined being those the user may have in terms of service charge when the program is transmitted together with the auxiliary data items selected.

15. A data terminal apparatus having a function of performing streaming reception of the on-demand programs transmitted from a transmission server, selecting a set of auxiliary data items to be inserted into a program, from sets of auxiliary data items, and transmitting a signal representing the selected set of auxiliary data items, along with a terminal code of the terminal section.

16. The data terminal apparatus according to claim 15, further having a function of requesting the transmission server for the advantages and disadvantages of a set of auxiliary data items that can be selected, after selecting a program that may be

supplied to a user, and informing the user of the advantages and disadvantages transmitted from the transmission server.

17.   An authoring apparatus having a function of registering, storing and transmitting program prices for user, a function of registering, storing and transmitting supplier-side equivalent conditions, a function of designating positions

at which to insert auxiliary data items into a program, a function of designating auxiliary data items to be inserted into a program from auxiliary data libraries, and a function of determining an order in which to transmit the auxiliary data items prepared for a program and holding the order determined, in the form of an auxiliary data transmission list.

18.   The authoring apparatus according to claim 17, for designating groups of auxiliary data items to be inserted into a program, from the plurality of auxiliary data libraries.

19.   The authoring apparatus according to claim 17, for determining an order in which to transmit the auxiliary data items prepared for a program and holding the order determined, in the form of an auxiliary data transmission list.

20.   The authoring apparatus according to claim 17, further having a function of registering, storing and transmitting advantages and disadvantages a user has when a series of auxiliary data items designated in at least one auxiliary data transmission list are transmitted.

21.   The authoring apparatus according to claim 17, further having a function of

registering, storing and transmitting the equivalents to be paid among suppliers when the auxiliary data items in the auxiliary data transmission list are transmitted and the auxiliary data equivalent conditions that are an order to moving

data.

22.   A data-providing method comprising the steps of:

processing data items obtained by dividing each program data, attribute data of the auxiliary data items, and user profile data, thereby to automatically assemble data;

selecting a group of auxiliary data items to be inserted into the program data in accordance with the data thus assembled; and

transmitting a continuous stream of content data that consists of multimedia content groups, each composed of program data and auxiliary data items.

23.   A data-providing method comprising the steps of:

transmitting a continuous stream of content data that consists of multimedia content groups, each composed of program data and auxiliary data items;

processing data items obtained by dividing each program data, attribute data of the auxiliary data items and user profile data, thereby to automatically assemble new data; and

selecting the auxiliary data items to be inserted into the program data in accordance with the new data assembled by the control section, thereby to transmit a continuous stream of data.

44

24. A data-providing method comprising the steps of:

selecting a set of auxiliary data items to be inserted into a program, from sets of auxiliary data items, at a terminal that receives a stream of on-demand programs from a transmission server;

transmitting from the terminal a signal representing the selected set of auxiliary data items, along with a terminal code of the terminal section;

receiving, at the transmission server, the signal transmitted from the terminal and representing the selected set of auxiliary data items;

assembling, in the transmission sever, the auxiliary data items in real time in accordance with a transmission list of auxiliary data items that correspond to the set of auxiliary data items inserted in a series of programs to be transmitted to the terminal; and

transmitting the auxiliary data items from the transmission server.